Tactical Hydro System

Tactical Hydrographic Survey System

Tactical Hydrographic System Transport Case

FEATURES

- Open architecture allowing for future expansion.
- Use of “Best in Class” systems.
- Scalable system for expansion of other sensors.
- Can be deployed on Vessels of Opportunity.
- Suitable for Rapid Environmental Assessment and Mine Hunting.
- Minimal manning requirements.
- Automated Data Collection and Processing
- Fully integrated from data collection to product.
- Data can be reprocessed easily.
- High quality data produces navigation charts that meet internationally recognised standards.
- Detects significant features that satisfy IHO S-44 survey requirements.
- Suitable for Shallow water < 100 m.

L-3 Nautronix develops sophisticated solutions to measure and communicate data through water. It specialises in applications involving underwater test and evaluation and through water communications.

This Capability Statement describes the Tactical Hydrographic Survey System.

The Tactical Hydro system is an off the shelf solution for Hydrographic Data that provides a three dimensional model of the sea floor using multi-beam, single beam and side scan sonar imagery.

The processing subsystem has the following key features:

- data merging and fusing,
- processing and conduct of data verification and
- validation throughout the data life cycle.
- inclusion of integrated data management system,
- area based CUBE processing systems, and the
- ability to maintain original data and reprocess all data at any time.

The system is designed to require minimal manning, delivering a system that reduces stress and fatigue on minimally-manned crews, whilst maximising the rate of effort of the vessels, providing a value for money solution to the customer.

L-3 NAUTRONIX Hydrographic Experience

L-3 Nautronix and its sister Companies L-3 Klein and L-3 ELAC have significant experience in the design and installation of Hydrographic systems.

L-3 Nautronix is the Prime Systems Integrator for the Australian Naval Program SEA1401 known as the SML Upgrade. This program will provide the an upgrade to the shallow water surveying capability of the four RAN PALUMA Class Survey Motor Launches (SML), as well as the supply of three Tactical systems and six portable Systems and all associated Systems Engineering required.

The upgrade shall enable the vessels to contribute to the Australian survey task annual Rate of Effort (ROE) and to more effectively perform the contingency roles detailed in higher level preparedness directives.

SPECIFICATIONS

The Tactical Hydro System has the following performance capabilities:

- On-vessel generation of Product
- Lightweight and Portable Splash Proof Design
- Data Validation and Quality Control using CUBE and Data Visualization techniques
- Seafloor Classification
- Human Factors Engineering
- Near Real Time Processing Capability
- Coordinating Systems processes for maximum performance and reduced interference.

COMPONENTS

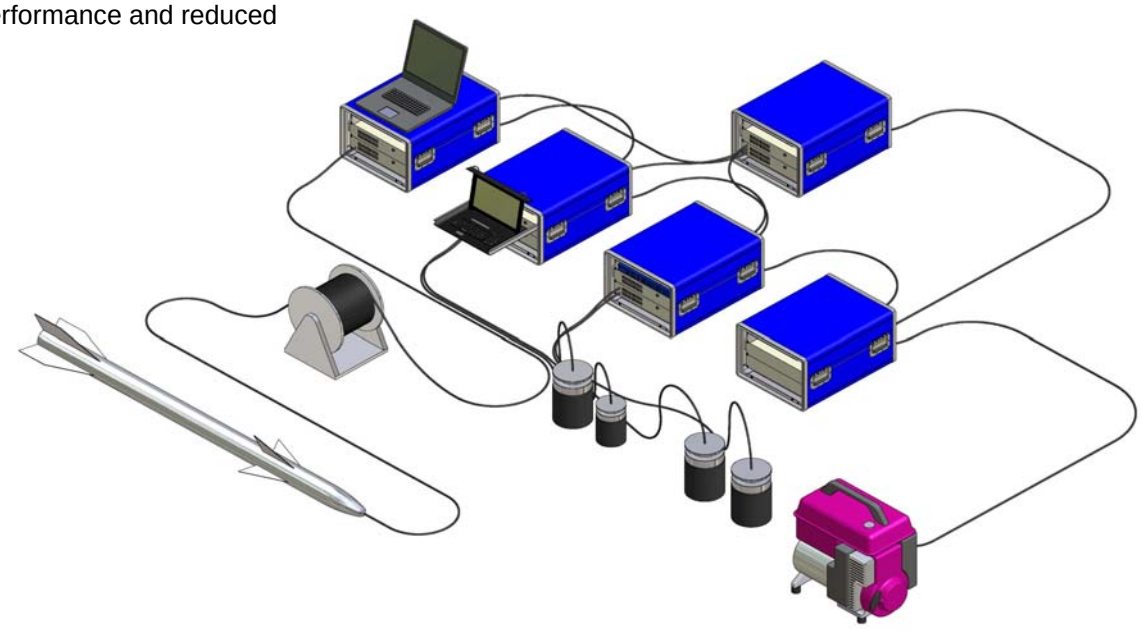
The Tactical Hydro System comprises the following major components:

- Survey Planning Systems
- Integrated Navigation Unit (providing motion ,position and heading)
- Single Beam Echo Sounder
- Multibeam Echo Sounder
- Data Logging and Storage systems
- Portable Sidescan Sonar
- Sound Velocity Profiler.

OPTIONS

The Tactical Hydro System has the following options:

- Power Generator and Uninterruptible Power Supplies
- Variable Output formats (Geotiff, ENC's, AML, HTF, XTF, XML, etc.)
- Forward looking Avoidance Sonar
- Mine hunting CAD/CAC
- Integration of Third Party sensors
- Real-time Sound Velocity Profilers
- Communications Links to transfer data
- Training systems
- Onshore data processing systems.
- Inertial Navigation Systems.



Tactical Hydrographic Survery System Overview

communications
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